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(54) **REAL-TIME SIGNAL PROCESSING SYSTEM FOR SERIALLY TRANSMITTED DATA**

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(57) **ABSTRACT**

A data transmission system having a real-time data engine for processing isochronous streams of data includes an interface device that provides a physical and logical connection of a computer to any one or more of a variety of different types of data networks. Data received at this device is presented to a serial driver, which disassembles different streams of data for presentation to appropriate data managers. A device handler associated with the interface device sets up data flow paths, and also presents data and commands from the data managers to a real-time data processing engine. Flexibility to handle any type of data, such as voice, facsimile, video and the like, that is transmitted over any type of communication network with any type of real-time engine is made possible by abstracting the functions of each of the elements of the system from one another. This abstraction is provided through suitable interfaces that isolate the transmission medium, the data manager and the real-time engine from one another.

41 Claims, 6 Drawing Sheets